

Looking back at changes in renewables in last 20 years and future outlook of RES potential in Central Europe



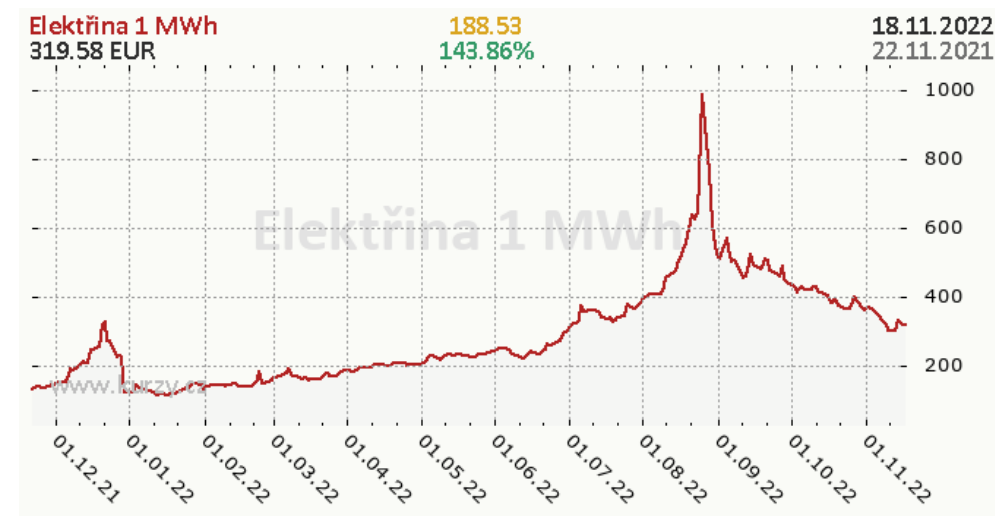
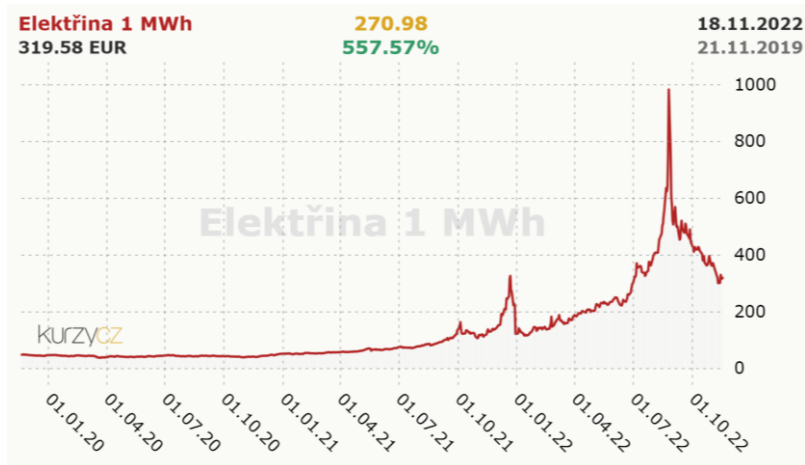
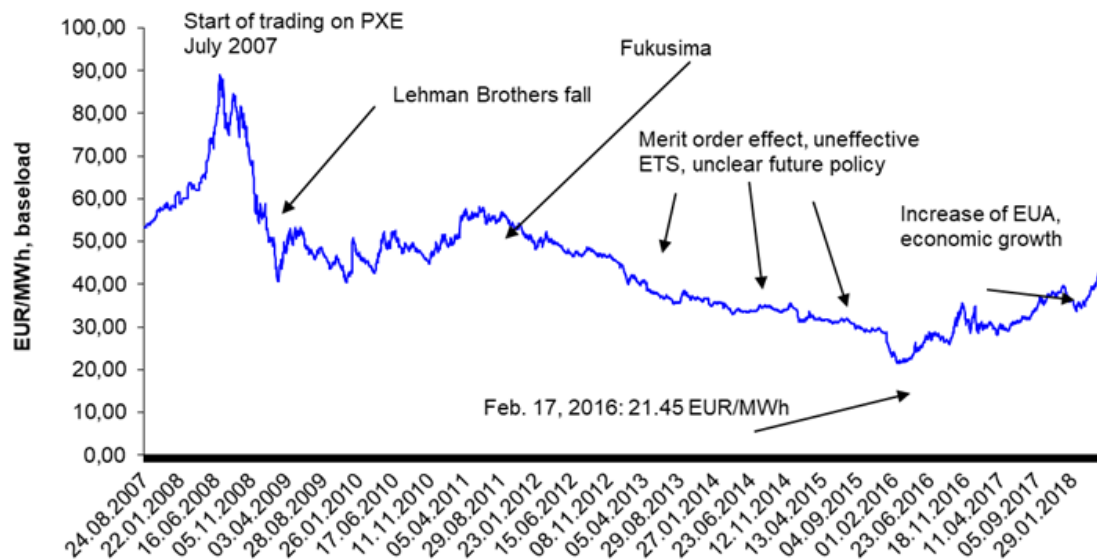
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Looking back

The electricity market reflects many changes in the surrounding world - changes in technology, changes in priorities, new policies, geopolitical aspects, etc.

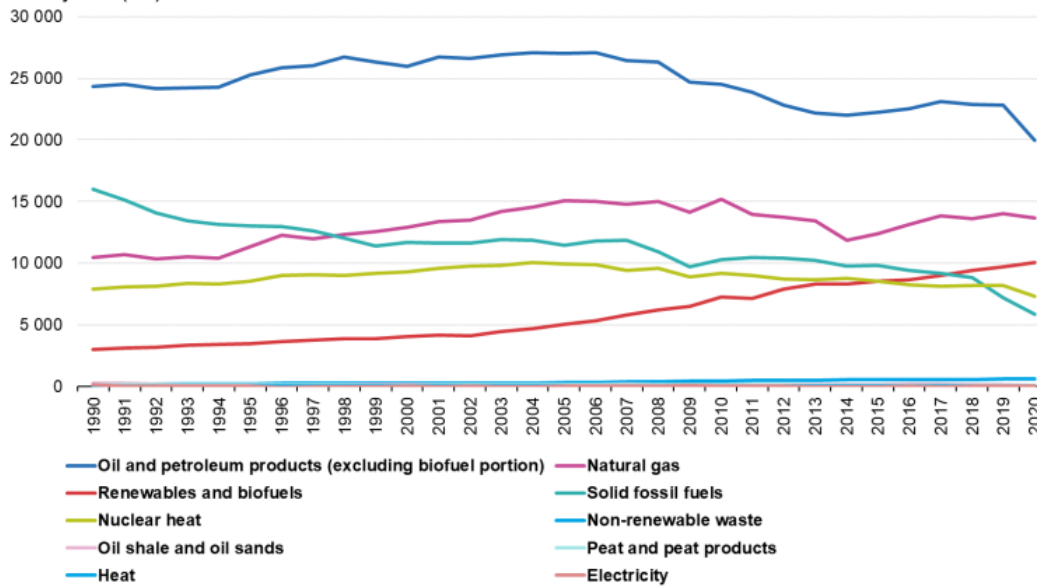


Source: PXE, one year contract

Energy structure development - EU

Gross available energy by fuel, EU, 1990-2020

Petajoule (PJ)

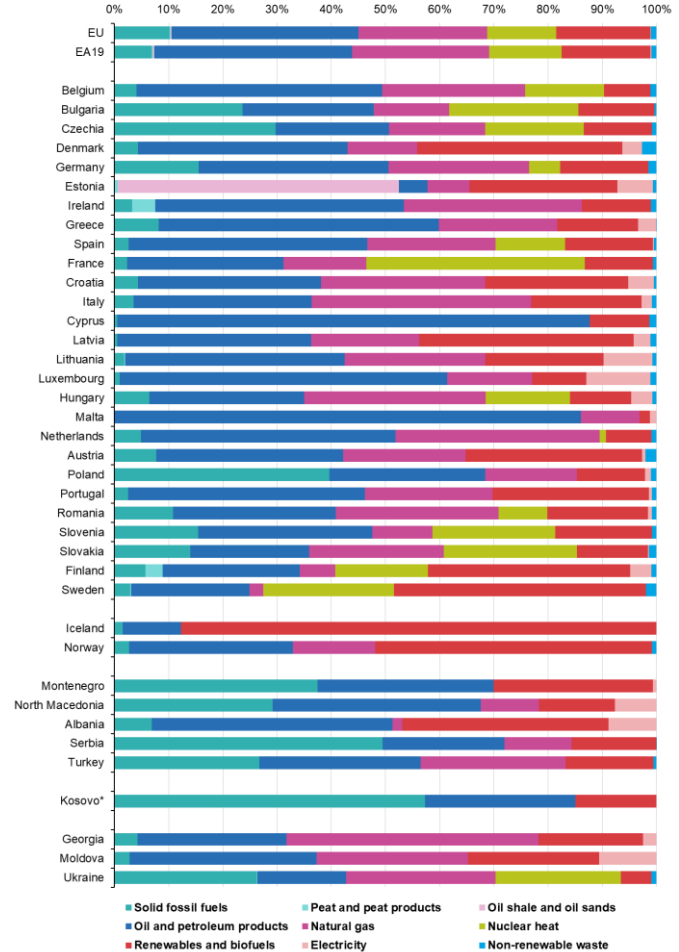


Source: Eurostat (online data code: nrg_bal_c)

eurostat

Gross available energy by fuel, 2020

(%)



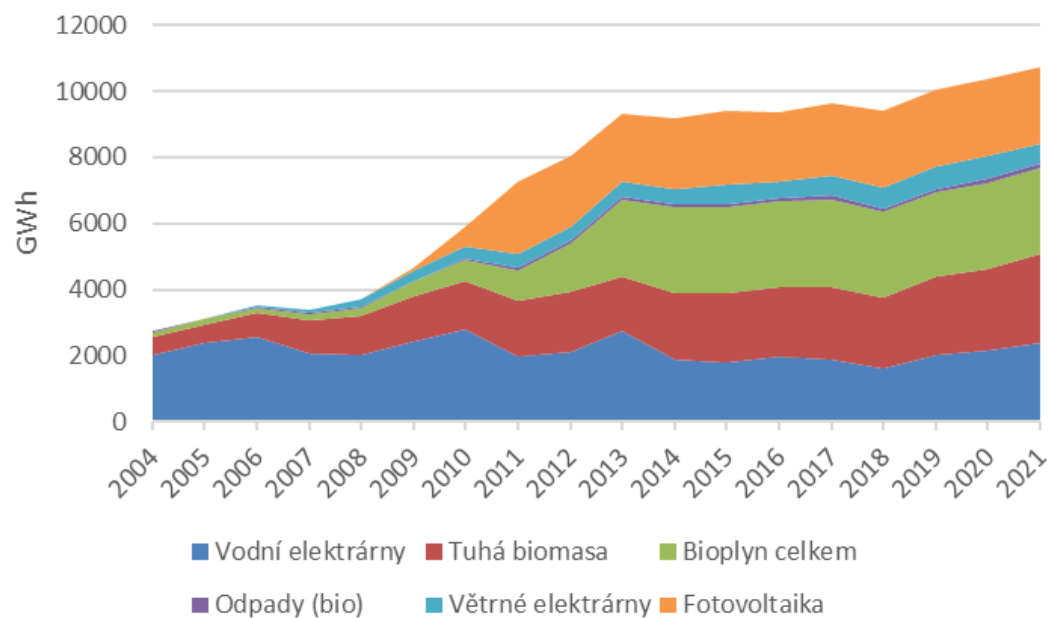
* This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence.

Source: Eurostat (online data code: nrg_bal_c)

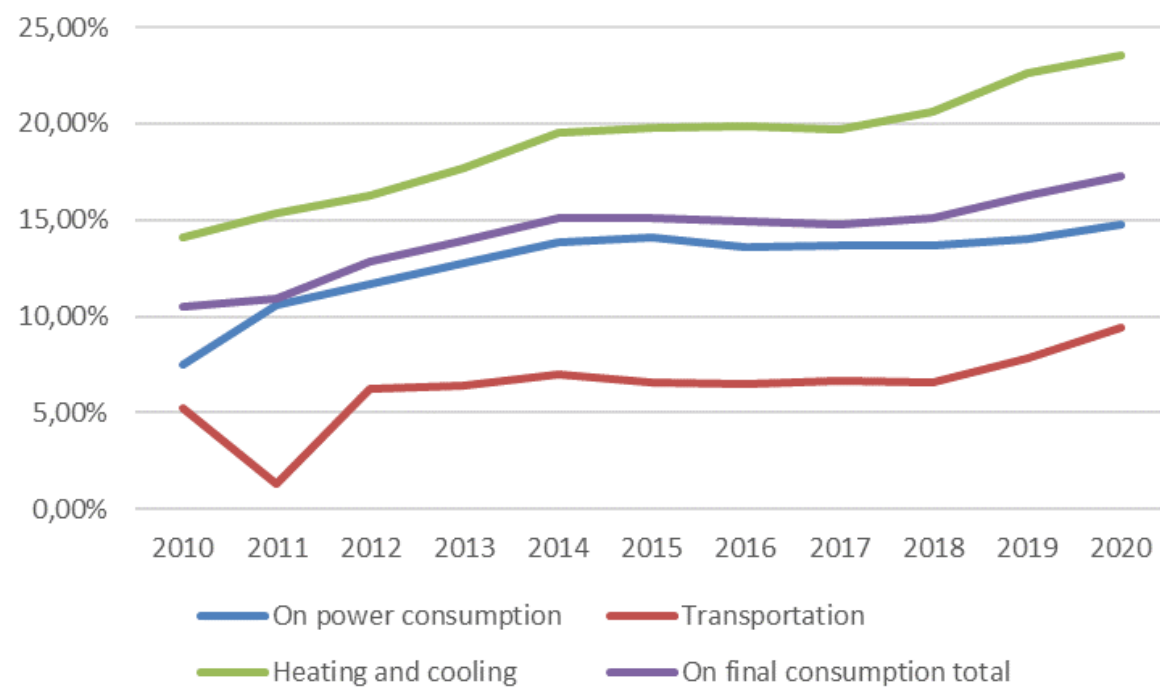
eurostat

Czech Republic

Power generation



RES share generation



RES milestones – CZ (2005-2010)

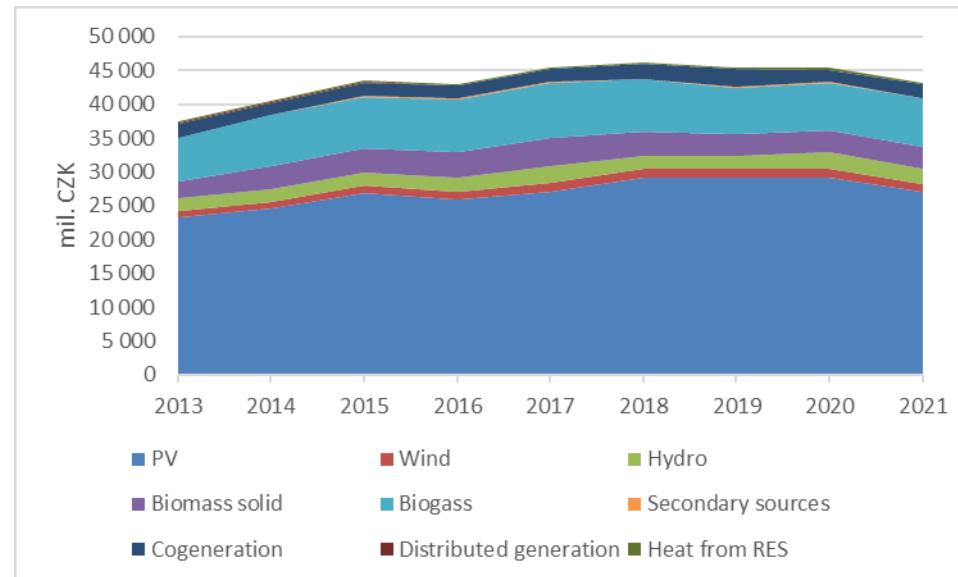
2005: Act 180/2005 Col. - start of systematic support

- FIT and FIP scheme
- Until 2010, it was considered effective and sufficiently motivating
- Czech Rep. fulfilled the target for the year 2010 (Directive 77/2001) – 8,23%
- Main questions discussed:
 - Logic of the scheme – technological neutrality
 - Biomass types
 - Co-firing
 - Reference models and data collection

RES milestones – CZ (2010-2013)

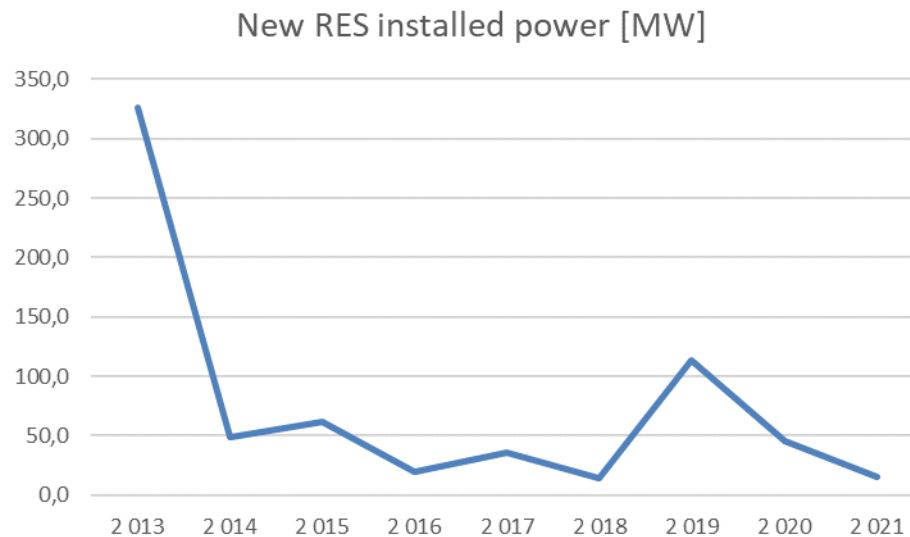
PV boom in 2010 – result of combination of several factors incl. gapes in legislation

- Enormous increase of RES support cost
- New legislation – Act 165/2012
 - Slowing or stopping the development of RES



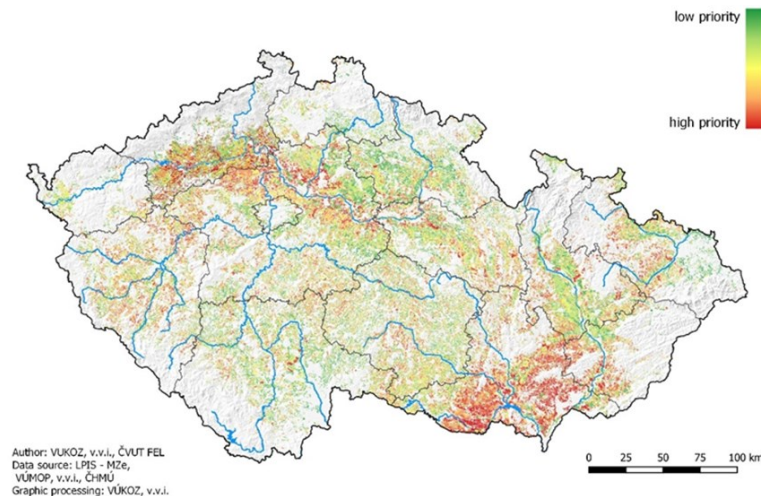
RES milestones – CZ (2013-2022)

Significant slowdown in the development of RES for electricity generation
- a consequence of the reduction of support and uncertainties for
investors in terms of legislation



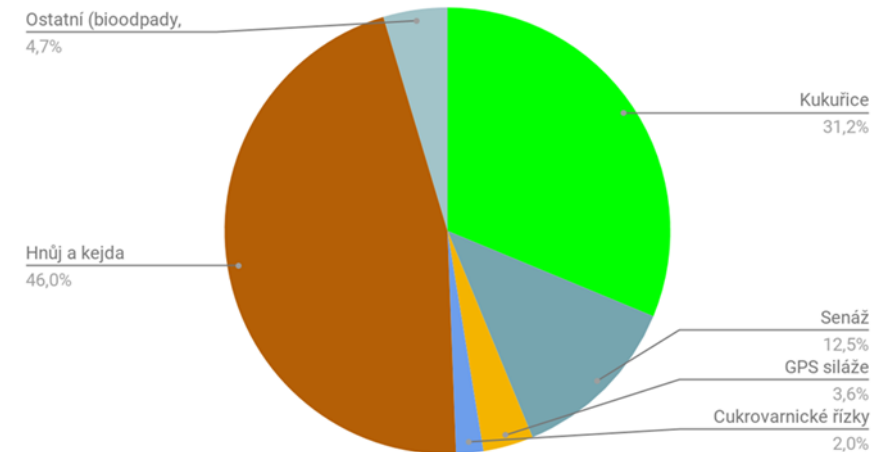
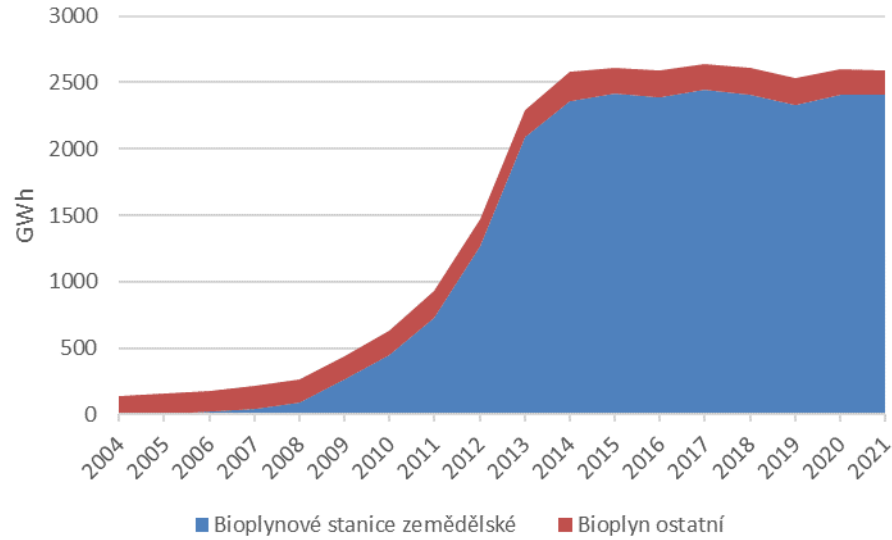
Changes during last two decades

- Biomass: redefinition of biomass potential – sustainability criteria (reduction of optimism)
 - Preference of non-production functions related with energy crops



Changes during last two decades

- Biogas: discussion on contribution to ancillary services and the role of biomethane (up to 1-1,2 bil. m³?)
 - Inputs: sustainability criteria



Changes during last two decades

- PV: preference of small distributed applications,
- New solution: agrivoltaics



Changes during last two decades

- From the discussion how to start to the discussion how to continue
 - Energy communities
 - Continuation in RES support
 - RES is not only for power generation – significant role e.g. In decarbonization of district heating sector
- New discussion
 - RES and flexibility
 - Market coupling
 - Sustainability criteria
 - Systematic policy in RES support